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10/003,037	11/02/2001	William D. Morgan	IAEC:006US/MTG	1213

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EXAMINER

MENON, KRISHNAN S

ART UNIT

PAPER NUMBER

1723

DATE MAILED: 07/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/003,037

Applicant(s)

MORGAN ET AL.

Examiner

Krishnan S Menon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-13, 16-23 and 28-32 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Wilson et al (US 4,438,863).

Wilson teaches a pond covering system with a membrane (figures, col 3 lines 3-7) having floatation members covered by the membrane (col 3 lines 20-54; 22,28-fig 4; fig 1; col 3 lines (26-29) and plurality of gas relief vents (col 3 lines 30-43; at 34-fig 4) as in instant claims 1 and 7. With ref to fig 4, a combination of one of the float 22 on the left and the membranes 10 on the right could be identified as the first membrane and the first float to read into claim 1, and the sleeve 28 covering the float 22 could be the compartment membrane.

Claim 16 defines a first membrane, a second membrane, a float whose width is less than 25% of the first membrane, and a gas relief vent defined by and between the first and second membrane. The floats (22-fig 4) which are completely covered by the membrane (28, which is of material same as that of 10) have space 32 between them forming a gas-collecting channel, with the spaces between the straps (34) and vent openings (38) carrying the gas to the gas pipe (36). The membrane is 10, and there are two of them – to the left and to the right of the floats 22. Floats 22 are narrower than the membrane (width  $\leq$  25% of the membrane). Therefore, as recited in claim 16, first and second membranes are coupled, with the gas relief passages between them.

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Claims depending from 1 and 16: The gas relief passage is elevated above the membrane level as in instant claim 6 (see fig 2 and 4). The floatation members are sealed inside the membrane as in instant claims 2-5, 17 and 18 (fig 2,4,6, 68- fig 8). A link member couples the floatation members as in instant claim 8 and 9 (40a-fig 4) with a weight (pipe 36-fig 4), and a second elongated member as in instant claim 10, 19 and 20 (see 50-fig 7). The membrane is anchored by an anchor system as in instant claim 11 and 21 (col 3 lines 20-25), which comprises connectors coupled to the edge of the membranes as in instant claim 12 and 22 with sleeves as in instant claim 13 and 23 (20 fig 2).

Wilson (863) teaches a method for venting pool with providing a membrane pool cover having one or more membranes and float supports sealed in the membrane, and with a series of gas vent openings as in instant claims 28-32 (see figures 1-10 and col 3 line 3-col 6 line 58).

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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1. Claims 14, 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson (863) in view of Vogel et al (US6,136,194).

Wilson (863) teaches the membrane cover of instant claims as in instant claims 1 and 7 above, except for the service opening. Vogel (194) teaches a service opening with adequate edge support floatation members (formed by 51-fig 2) for elevating the service opening edge above the a body containing liquid, and service opening membrane (formed by 52) coupled to the service opening edge, for supporting mechanical equipment, etc (col 5 lines 4-23) in a floating pool cover. It would be obvious to one of ordinary skill in the art at the time of invention to use the teachings of Vogel (194) in the teachings of Wilson (863) to provide service openings for providing mechanical equipment, etc.

2. Claims 15, 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson (863) in view of Vogel et al (US6,136,194) as applied to claims 14, 24 and 26 above, and further in view of Ballu (US 4,244,819)

Wilson in view of Vogel does not teach a service opening weight coupled to the membrane and spaced apart from the edge. However, providing a weighted-down "ballast" is commonly used for floating edges for stability as taught by Ballu (see figures; col 1 lines 34-39). It would be obvious to one of ordinary skill in the art at the time of invention to provide a weight as taught by Ballu in the teaching of Wilson in view of Vogel for stability of the floating edges of the service opening.

### *Response to Arguments*

Applicant's arguments filed 5/22/03 have been fully considered but they are not persuasive.

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Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made.

Argument re rejection of claim 1-13: Applicant argues that Wilson discusses at best "longitudinally spaced transverse passages", but does not teach plurality of gas relief passageways. The spaces between the straps 34 form such passageways, which are open to the conduit 36 through openings 38 in fig 4. Applicant is correct in the argument that parts 34 are straps, but there are gaps between the straps 34 forming gas relief passageways.

Arguments re rejection of claim 16-23: Argument re 'what alleged membrane ... is second membrane...', see the rejection. Argument that the sleeve 28 of the Wilson ref is not connected to cover 10 so as to define gas relief openings, see figure 4: sleeve 28 on the left side of the figure 4 is connected to the membrane 10 on the right side of the figure by the strips 34, and the gaps between the strips 34 form gas vents. From fig 4, one could pick any combination as first and second membranes – the membrane 10 on the left as first membrane, with membrane 10 on the right as the second, or the sleeve (28) on the right as the second membrane, so that the vent openings fall between the first and second membrane.

Argument re rejection of claim 28 and 29: Claim 28 recites a venting methods comprising a first membrane coupled to a first float and covered by a first float compartment membrane, with the first membrane and the compartment membrane are coupled, and have the gas relief vents in them. The ref has membrane 10, compartment membrane formed by sleeve 28 and strips 34 which cover the floats 22, with relief passages formed between the strips 34, which vent gas unobstructedly to the gas vent pipe 36 through the openings 38, which eventually leads to the atmosphere. Claims

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are open-ended, which does not preclude having additional vents or passageways or conduits.

Having additional elements do not make a reference as teaching away.

Argument re rejection of claim 30 and 31: please see the response to argument re claim 28. Again, Wilson having a conduit does not make that ref teaching away; and claim 30 is open-ended.

Argument re rejection of claim 32: In addition to the arguments raised above, the applicant argues that Wilson ref does not vent the gases from around the outer edges of cover 10. The relevant portion of the claim reads: 'positioning the covering system to allow gas from the body to vent to atmosphere around the outer edges of the first membrane'. Wilson has longitudinal and transverse strings of floats (see fig 1 and 7). The string 44 lifts the membrane 10 above the water to form channels (at 18, fig 5 and 6) underneath, which connect the outer edges of the membrane to the vent openings at the floats 22, and to the vent line 36.

Argument re rejection of claims 14,15 and 24-27: Applicant argues that Wilson fails to teach the claimed second floatation member that is coupled to the first membrane so as to elevate the service opening edge above a body of ... liquid. Wilson has a plurality of floating members as seen in fig 7, and they are all coupled to membranes. The office action indicated that Wilson does not teach a service opening, and therefore, this argument is moot. Applicant argues that secondary ref Vogel does not teach having a service opening membrane coupled to the edge of the opening. Vogel teaches a service opening in the module 37, which is covered by a sheet casing 52 of 'durable geomembrane'. There is nothing in the ref to indicate that the service opening cutout edges in module 37 could not or would not be covered by this same membrane to protect the insulating float 51.

Arguments re the weights coupled to the service openings in claims 15, 25 and 27: weighted down "ballasts" are commonly used for stability of floating edges as in this service opening, and is

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not novel. However, further consideration has been given to this limitation since the examiner inadvertently left it out in the first action. This action is, therefore, made non-final.

### *Conclusion*

This action is made non-final because further consideration has been given to claims 15, 25 and 27.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krishnan S Menon whose telephone number is 703-305-5999. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L Walker can be reached on 703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Krishnan Menon  
Patent Examiner  
July 16, 2003

  
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